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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

09/519,547

03/06/00

TRIEPELS

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PHN 17,327

MMC2/0814

C/O U.S. PHILIPS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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NGHYEN. T

EXAMINER

2833

110

PAPER NUMBER

DATE MAILED:

ART UNIT

08/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/519.547 Applicant(s)

Tripels et al

Examiner

Truc Nguyen

Art Unit 2833



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 2b) X This action is non-final. 2a) This action is FINAL. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quay 1935 C.D. 11; 453 O.G. 213. **Disposition of Claims** __ is/are pending in the applica 4) X Claim(s) 1-3 and 5-10 4a) Of the above, claim(s) ______ is/are withdrawn from considera is/are allowed. 5) Claim(s) 6) X Claim(s) 1-3 and 5-10 is/are rejected. is/are objected to. 7) Claim(s) are subject to restriction and/or election requirem 8) Claims ___ **Application Papers** 9) The specification is objected to by the Examiner. is/are objected to by the Examiner. 10) The drawing(s) filed on _ is: a approved b) disapproved. 11) ☐ The proposed drawing correction filed on ____ 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b) Some* c) None of: 1.
☐ Certified copies of the priority documents have been received. 2.
☐ Certified copies of the priority documents have been received in Application No. ___ 3.

Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 18) Interview Summary (PTO-413) Paper No(s). ___ 15) Notice of References Cited (PTO-892) 19) Notice of Informal Patent Application (PTO-152) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)

20) Other:

Office Action Summary

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on 7/23/2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/519,547 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-3, 6, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzery (US 4,012,117).

Regarding claims 1-2, Lazzery discloses a display device (20) comprising a first substrate (90) having conductor pattern (106) and electrically conducting connections (24) between the pattern and conducting tracks (40) on a support (12), said conducting connection comprising a resilient connection (70) which provides a variable-pressure metal-metal contact such as copper clad gold.

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Lazzery does not specifically disclose the metal-metal contact is a chosen from the group of gold, silver and nickel. Lazzery only disclose the metal-metal contact is made by copper clad gold. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a gold material into Lazzery's contacts for good conductivity. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Lazzery substantially discloses the claimed invention except the resilient connection is a resilient connection pin. However, it would have been obvious to one having ordinary skill in the art at the time the inventions was made to provide the resilient connection is not resilient connection pin, since it has been held that omission of an elements and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson, 136 USPQ 184.*

Regarding claim 3, Lazzery discloses the metal-metal contact is present at the area of the first substrate.

Regarding claim 6, Lazzery discloses the conductor pattern on the first substrate faces the support.

Regarding claim 8, Lazzery discloses the display device comprises a second substrate (92) opposite from part of the first substrate (90) and an electro-optical material (93) between the two substrates, each being provided with substrate electrodes (94) which define pixels with the

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electro-optical material, the first substrate being provided with the conductor pattern beyond the part of the first substrate located opposite the second substrate.

Regarding claim 10, Lazzery discloses a part of the conductor pattern is connected in an electrically conducting manner to a conducting track on the side of the support remote from the first substrate.

4. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzery (US 4,012,117) as applied to claim 1 above, and further in view of Hiramoto et al (US 5,847,783).

Lazzery substantially discloses the claimed invention except the conducting connection between the resilient conductor and the conductor pattern comprises an anisotropically conducting foil.

Hiramoto et al discloses an anisotropic conducive adhesive (20) is used in the liquid display (column 4, lines 20-23).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an anisotropical material into Lazzery's conducting connection, as taught by Hiramoto et al for electrically conducting purpose.

Regarding claim 9, Lazzery discloses Lazzery substantially discloses the claimed invention except the display device comprises an electroluminescent material.

Hiramoto et al discloses an electroluminescent layer (15c) is used in the liquid display (column 4, lines 9-13).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an electroluminescent material into Lazzery's liquid display, as taught by Hiramoto et al providing self emitting light to the display.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzery (US 4,012,117) as applied to claim 1 above, and further in view of Iguchi (US 5,233,451).

Lazzery substantially discloses the claimed invention except the electrically conducting connection comprising a conducting part which encloses the edge of the first substrate.

Iguchi disclose a conducting element (23) which encloses the edge of the substrate (16) for used in a liquid display.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a conducting element encloses the edge of Lazzery's first substrate, as taught by Iguchi for better electrical connection.

Response to Arguments

6. Applicant's arguments filed on 5/25/2001 have been fully considered but they are not persuasive. Because:

Applicant's argues that:

"Lazzery's rubber is not the equivalent of, nor does it anticipate Applicant's pin because rubber and resilient pins function in substantially different way...Lazzery fails to teach or suggest the use of a resilient connection pin." (Page 3, lines 13-16)

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4. 13

The examiner respectfully disagrees.

Lazzery uses rubber to bias the conductive terminals against the contact traces, thus increasing the presure contact that made good electrical connection. The same way as applicant's pin, the applicant uses the pin to give pressure contact to made good electrical connection.

Rubber also give variable pressure with respect to the deflection of the rubber, F=kx. Where F is a force, k is a constant, and x is a deflection. The force is a function of the deflection. Similar to the applicant's pin, the resilient part 19 of the pin is a spring which has a characteristic of F=kx.

The examiner belives that Lazzery's rubber has the same function with applicant's pin as to give variable pressure and made good contact connection. The only difference between Lazzery's rubber and the applicant's pin is the shape and material made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. Nguyen whose telephone number is (703) 306-4004. The examiner can normally be reached on Monday through Thursday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Austin Bradley, can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

P. Bradley
Paula Grand du Mais
Suppressory Patent du Mais
Technology Conter 2000

T. Nguyen - August 9, 2001